Fall 1998

# Pacific Islands Fishery News

Newsletter of the Western Pacific Regional Fishery Management Council

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National Marine Fisheries Service
2570 Dole Street
Honolulu, Hawaii

## Reducing Seabird-Longline Interactions

Seabird interaction and mortality due to longline fishing is a worldwide problem that has led to mandatory and voluntary mitigation and deterrent regulations in various locales. In Hawaii, the local longline fleet is associated with an estimated 3,400 albatross deaths annually. Ninety-eight percent of the world's population of black-footed albatross and 99 percent of the world's population of Laysan albatross nest in the Northwestern Hawaiian Islands (NWHI). The endangered short-tailed albatross is also known to occur in areas commonly fished by the Hawaii-based pelagic longline fleet.

To evaluate the impact of seabird mortality due to fisheries interactions, the Council held a workshop on black-footed albatross population dynamics Oct. 8–11 in Honolulu. Participants included international experts on mark-recapture statistics, population modeling, seabird ecology and fisheries biology and management. The first two days focused on the analysis and interpretation of albatross banding data so as to inform participants about the short- and long-term trends in the albatross populations. Marine biologist Kathy Cousins, contracted by the Council to develop a bird-banding relational database for use at the workshop, provided the first-ever overall analysis of 60 years of bird-banding efforts in the NWHI by U.S. Fish and Wildlife Service and private researchers. Cousins' analysis revealed the poor state of the data collection and reporting system. On the final day, participants examined fishery-bird interactions to assess the effects of longline fisheries on the black-footed albatross population.

**Buoys and streamers towed behind the boat distract and scare birds.**

Another action by the Council is a study designed to determine bird-interaction mitigation techniques that could be used by the Hawaii-based longline fleet. The project, conducted by the environmental consulting firm Garcia and Associates, began in May. A preliminary, practice-run off Honolulu was followed by a trip Aug. 31–Sept. 21 north of the main Hawaiian Islands. During this trip, mitigation techniques used in New Zealand, Japan and elsewhere were adjusted for Hawaii longline vessels, which are generally smaller and have different setting platforms, hook sizes and weight placements. A second, one-month research trip began Sept. 23. In all, five research trips of approximately 30 days each are scheduled on Hawaii longline vessels.

The methods being tested include, in part, the following:

- *tori* (Japanese for "bird") lines and poles, which get branch lines with swivel and streamers high behind the boat to distract and scare birds;

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**Seabirds gather behind a fishing vessel. Reducing their interactions with longline vessels is the focus of a recent Council workshop and ongoing project.**

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# Issues Clarified at MHLC-3, to be Tackled at MHLC-4

Delegates from 27 Pacific Island states and distant-water fishing nations (DWFNs) made modest headway at the Third Multilateral High-Level Conference (MHLC-3) June 22–26 in Tokyo. The U.S. delegation included representatives from the Department of State, the National Marine Fisheries Services, the Coast Guard, the governments of American Samoa and the Northern Mariana Islands, the Western Pacific Regional Fishery Management Council and fishing industry and environmental organizations.

The parties worked from a set of draft articles prepared by the conference chairman, Ambassador Satya Nandan of Fiji, currently the secretary general of the International Seabed Authority. The articles closely mirrored the United Nations agreement on straddling and highly migratory fish stocks, commonly known as the UN Implementing Agreement. While progress was made on many issues, unresolved differences were also brought more clearly into focus.

Negotiations are slated to continue Feb. 8–19, 1999, with the United States hosting MHLC-4 in Honolulu at the Hawaii Convention Center. Participants are committed to negotiate a conservation and management mechanism for highly migratory fish stocks in the western and central Pacific by the end of 2000.

As revealed at MHLC-3, one of the more sensitive issues to be resolved is that of compatibility (the harmonization of conservation and management measures applied within areas of national jurisdiction and those on the high seas). There was a general agreement that a global cap on fishing throughout the range of a given stock should be established. However, island states questioned whether these regional arrangements would affect the exercise of their sovereign rights with regard to fishing in their 200-mile exclusive economic zones (EEZs).

Another somewhat contentious issue is the decision-making process. The 16 island nations constitute the majority of the conference participants, but the DWFNs land the most fish and assume the most financial risk in the area. The U.S. delegation expressed a preference for arriving at decisions by consensus but said it could accept putting decisions to a vote provided that there was an objection procedure. The chairman's text called for consensus to be sought in the first instance, with stalemates to be resolved by a three-quarters majority vote—a proposal that the U.S. did not support.

Costs and budget allocation were of particular concern to the Pacific Island states, who questioned their ability to pay. Some DWFNs expressed concern over the chairman's text that called for 30 percent of the budget to be split among the parties while 70 percent would be apportioned according to fish catches.

Other issues to be resolved include area of application; subsidiary bodies; precautionary approach; scientific committee; observer and monitoring, control and surveillance programs; transshipment; and transparency.

# 97th Council Meeting Highlights

At its 97th meeting in Kailua-Kona, Hawaii, July 27–29, the Council approved actions that address the fisheries of American Samoa, the Northwestern Hawaiian Islands (NWHI) and the main Hawaiian Island (MHI) and the Council's fishery management plans, as well as other issues.

In a measure intended to protect and promote the local small boat fishery in American Samoa, the Council approved an area closure that prohibits fishing vessels over 50 ft in length from fishing for pelagic fish within 50 nautical miles of the islands of American Samoa, except Swain's Island, which will have a 30 nm area closure. Vessels larger than 50 ft that received federal longline permits prior to Nov. 13, 1997, will be exempted from the closure.

Addressing potential overfishing and low economic returns in the bottomfish fishery of the southern part of the NWHI, i.e., the Mau Zone, the Council approved an amendment that sets the long-range target number of bottomfish permits for the zone at 10. Twenty percent of the permits (2) will be reserved for eligible communities participating in a Western Pacific Community Development Program.

The Council approved action to request that the Secretary of Commerce remove MHI onaga, ehu and stressed hapuupuu from the national listing of overfished species. The best available scientific data strongly suggest that the onaga and ehu stocks in Hawaii range archipelago-wide, so while they may be depleted locally in the MHI, they are not biologically overfished. It also encouraged genetic research—conducted by the Hawaii Institute of Marine Biology (HIMB) and funded by DLNR—be continued on onaga and ehu and be pursued on hapuupuu. In September, the Council officially requested the National Marine Fisheries Service delist the species. The Council is now attempting to assist the HIMB to locate funds to complete its work.

Complying to new requirements of the Magnuson-Stevens Fisheries Management

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**On June 1, the state's management plan to close bottomfishing areas in the main Hawaiian Islands (MHI) and related regulations went into effect. This date was also set as a control date for a possible future limited entry program in the MHI. The regulations in the form of a colored map and brochure are available from the Department of Land and Natural Resources. To date, about 900 vessels have registered to bottomfish in the MHI.**

# Fish Tags: Different Types for Different Reasons

Fishermen in the central Pacific may encounter tags in tuna, billfish and sharks from many different tagging programs. Table 1 lists some of these tags.

The simplest consist of a thin, plastic streamer that is secured to the fish with a metal or nylon head. Sportfish tagging programs use tags that can be harpooned into a fish while it is still in the water. Tuna tagging studies use streamer tags that anchor behind the fin ray supports below the second dorsal fin. Streamer tags can provide large amounts of data necessary to gain an understanding of how a stock or population of pelagic fish behaves under different degrees of fishing effort.

Computer technology is revolutionizing tagging programs by the use of archival, or data logging, devices that are small enough to be carried by pelagic fish. The simplest electronic tags transmit a signal that can be picked up by a vessel that must follow the fish with a tracking device. A more sophisticated application uses "listening" stations positioned on the seafloor or on buoys to record when a tagged fish comes within range of the electronic listening device. It is useful for determining residence rates and homing behavior. True data-logging tags can record many different parameters several times per day and can obtain fascinating data on the life history of pelagic fish. The current generation of archival tags can record several months of data, including the fish's internal and external temperatures, swimming depth and approximate geographic position.

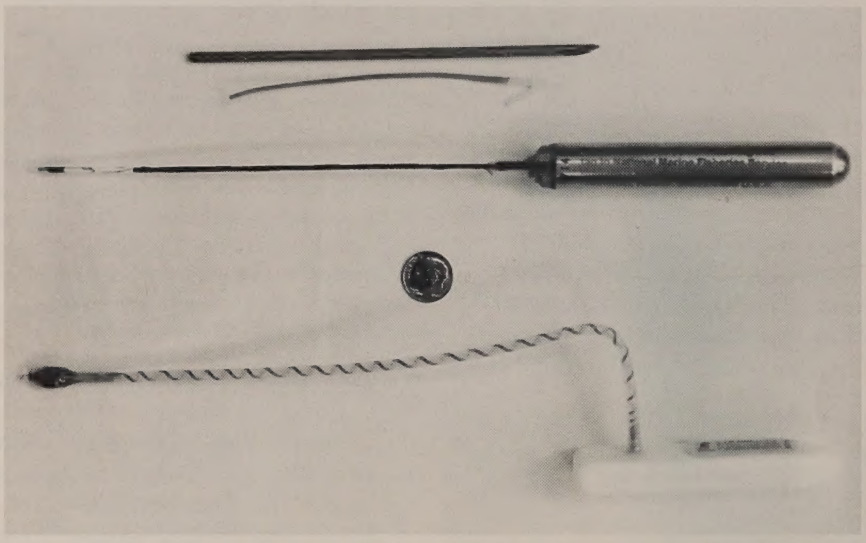
Currently, fish marked with archival tags must be recaptured by fishermen in order for the tag to be retrieved and the valuable information downloaded to a computer for analysis. To mitigate this problem, researchers are experimenting with "pop-up" tags, which detach from the fish after a specified length of time. The detached tags float to the surface of the ocean, automatically download data to orbiting satellites that transmit the data directly to land based

## Pelagic Fish Tags in the Central Pacific

| Fish species | Tag type/color | Legend | Reward | Program/Report to |
|---|---|---|---|---|
| yellowfin, bigeye and skipjack tuna | 13 cm nylon head dart, yellow | SPC NOUMEA REWARD | hat or shirt | Regional Tuna Tagging Project, Secretariat for the Pacific Community, BP D5, Noumea, New Caledonia |
| yellowfin and bigeye tuna | 11 cm nylon head dart, orange | For reward call 1-800-588-8066 | hat or shirt | Hawaii Seamount Tagging Project, University of Hawaii, 1 (800) 588-8066 |
| bigeye tuna | 11 cm nylon head dart, green | Big reward, call 1-800-588-8066 (must obtain accurate recapture date and retain fish head) | hat or shirt *and* $25 | Hawaii Seamount Tagging–special project, University of Hawaii or Inter-American Tropical Tuna Commission |
| yellowfin and bigeye tuna | 11 cm nylon head dart, orange | Hawaii Tagging Program, For reward call 1-800-588-8066 | hat or shirt | Hawaii Tuna Tagging Project, University of Hawaii, 1 (800) 588-8066, 1 (808) 956-4108 or ditano@soest.hawaii edu |
| bigeye tuna | Northwest Marine Technology and Wildlife Computers archival tags, metal silver or chartreuse | $$BIG REWARD $$ (long message giving return instructions) | $500 | NMFS/Pelagic Fisheries Research Program, NMFS Honolulu Laboratory, 2570 Dole St., Honolulu, HI 96822-2396 or 1 (808) 983-5300 |
| any tuna, marlin, swordfish, spearfish, etc. | metal head, nylon streamer inter-muscular, yellow | NMFS La Jolla, California USA 92038 | hat and certificate | NMFS Sport Fish Tagging Program, NMFS Southwest Fisheries Science Center, P.O. Box 271, La Jolla, CA 92038-0271 or 1 (619) 546-7186 |
| sharks | metal head, nylon streamer inter-muscular, yellow | NRIFSF, Orido 5-7-1, Shimizu 424, Japan 81 54 3359642 | hat or shirt | NMFS Honolulu, National Research Institute of Far Seas Fisheries, Orido 5-7-1, Shimizu 424, JAPAN 011 81 54 335-9642 |
| swordfish | metal head, nylon streamer inter-muscular, yellow | NMFS Honolulu call 808 943-1221 - REWARD | coffee mugs | NMFS Honolulu Laboratory, 2570 Dole St., Honolulu, HI 96822-2396 or 1 (808) 983-5300 |
| mostly billfish, some tuna | nylon-headed harpoon type, plastic streamer, yellow | Reward phone 800 437-6936 | shirt and certificate | Billfish Foundation, NMFS, 75 Vir. Beach Dr., Miami, FL 33149 |

computers. Another experimental tag uploads data to satellites when the fish are close to the surface of the ocean.

It is important for fishermen to realize that the requested recapture information and the tag return rewards vary between programs. However, they should always note at least the tag number, fish species, the catch date, catch location and the fish fork-length and weight. Fork length for tuna is the straight line measurement between the tip of the upper snout (mouth closed) and the center of the fork of the tail (NOT the to the tips of the tail). Billfish are normally measured from the tip of the lower jaw to the fork of the tail or from the rear of the eye to the fork of the tail. Some special programs require the whole fish or at least the head of the fish be retained. Normally, these programs offer a larger monetary reward.



**Although simple, the streamer tag (pictured above with its harpoon applicator) provides useful information on population behavior. More sophisticated archival devices (like the Northwest Marine Technology tag and the Wildlife Computers tag below it) provide data that can be downloaded to a computer.**

## Quarterly Planner

**Upcoming Council Events and Meetings**

**OCTOBER**

**25–31** FAO Expert Consultations on Conservation and Management of Sharks, Reduction of Incidental Catch of Seabirds in Longline Fisheries and Management of Fishing Capacity
Rome, Italy

**NOVEMBER**

**5–6** Northern Mariana Island Turtle Workshop
Saipan, Northern Mariana Islands

**11–13** 70th Science and Statistical Committee Meeting
1164 Bishop St., Suite 1400
Honolulu, Hawaii

**DECEMBER**

**1–3** 98th Council Meeting
Hawaii Prince Hotel
Honolulu, Hawaii

**JANUARY**

**20–23** Interim Scientific Committee Meeting
East-West Center
Honolulu, Hawaii

**FEBRUARY**

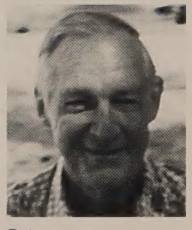
**8–19** Multilateral High-Level Conference 4
Hawaii Convention Center
Honolulu, Hawaii

## Hawaii Council Members Profiles

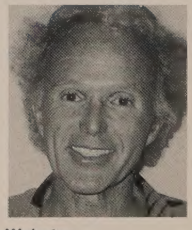
Cook

Farm

Morioka



Paty



Webster

**Jim Cook** co-owns Pacific Ocean Producers. He is a supplier of commercial fishing gear, a boat owner and a manager. He chairs the Western Pacific Regional Fishery Management Council.

**Frank Farm** directs the Hyperbaric Treatment Center. He owns Ocean Marine Services, a salvage and marine research operation. He is a part-time commercial fisherman involved in bottomfishing, diving and trapping.

**Roy Morioka** is district sales manager for NORTEL, a telecommunication equipment manufacturer. He chairs the Hawaiian International Billfish Association. He is a boat owner and a recreational fisherman with 40 years of experience.

**William Paty** is coordinator of Hawaii Marine Fisheries and trustee for the Mark A. Robinson Trust. He is a former chairman of the Hawaii Department of Land and Natural Resources and former vice president of Castle and Cooke.

**Tom Webster** is a boat owner and a commercial fisherman with 35 years of experience. Formerly a West Coast albacore fisherman, he has for the past 14 years operated in the Hawaii-based longline fishery aboard the F/V *Havana*.

**Correction** The name of council member Joaquin Tenorio, secretary of the Northern Mariana Islands Department of Land and Natural Resources, was misspelled in last issue's profiles.

# Indigenous Fishing Opportunities

Will indigenous island residents be able to again take green sea turtle? Currently, killing an individual of this protected species can get a person a civil penalty of up to $27,5000 per turtle and a criminal penalty of up to one year in jail and a $50,000 fine. On the other hand, the species has cultural significance to indigenous people, as evidenced in Mike McCoy's report *The Traditional and Ceremonial Use of the Green Turtle* (Chelonia mydas) *in the Northern Mariana Islands*, which was reviewed by the Council in April. A workshop in Saipan to discuss McCoy's findings is scheduled for Nov. 5–6. Coordinated by the Council, National Marine Fisheries Service, University of Hawaii Sea Grant Program, U.S. Fish and Wildlife Service and NMI Division of Fish and Wildlife, it will explore options for requesting a permit for a take of green sea turtles and the development of a sea turtle conservation plan. Similar workshops will be planned for Hawaii, Guam and American Samoa. Contact the Council office for a copy of McCoy's report.

Communities interested in establishing demonstration projects to foster and promote the involvement of indigenous island residents in fisheries may be eligible for direct grants from the Department of Commerce and the Department of the Interior. Such projects could, for example, identify and incorporate traditional marine resource values, knowledge and practices into contemporary management schemes. They could also develop or enhance community-based fishing opportunities, establish and enforce community-based fishery management measures or support fisheries-related research, education and training. On Sept. 21 and 22, the Council's advisory panel on demonstration projects convened to discuss procedures for soliciting, evaluating and selecting projects for review by the Secretaries of Commerce and the Interior. It agreed that proposed projects will be reviewed on a competitive basis using criteria that include project goals, project design and approach, applicant experience, potential project impacts and project budget. The panel also recommended that a coordinator be contracted as soon as possible to get the program up and running. The Council will advertise the program widely to ensure that all interested parties have a chance to submit proposals.

Another opportunity for enhanced participation by communities of indigenous peoples in the fisheries under the Council's jurisdiction is through a Community Development Program (CDP). The Council's Native and Indigenous Rights Advisory Panel worked with the Office of Hawaiian Affairs, Ka La Hui and other groups to develop eligibility criteria for participation in a CDP. The criteria were submitted to the Secretary of Commerce in April. In August the Council approved a management measure that sets aside for CDP use 20 percent of the bottomfish permits for the Mau Zone fishery in the Northwestern Hawaiian Islands. The Council is currently investigating management measures that would serve as the foundation for a CDP in the other islands within its area.

**At the first meeting of the fishing demonstration project advisory panel are (from left) Colette Pi'ipi'i Machado, Estanislao Taisacan, Mike Fleming, Ione Wolf, Robert Richmond, Henry Sesepasara, Puanani Burgess and Melvin Makaiwi.**

## Don't Play with Your Food?

American, Australian, New Zealand, Japanese and Pacific Island gamefishing experts gathered in Kailua-Kona, Hawaii, July 29–August 1, to discuss the central and western Pacific recreational gamefish fisheries. A major goal of the Pacific Island Gamefish Tournament Symposium was to come to a clearer understanding of the means by which resource conservation and sustainable development goals might be attained.

Among the many presentations were reports from nearly all of the Pacific island entities on the situation of their particular locales. Two messages that were often repeated included a sense of diminishing fisheries resources and a difference in cultural perspective between developed and developing nations.

'Akau'ola, secretary for fisheries, Kingdom of Tonga, described the differences as "perplexing." He said that "for the indigenous people of the islands, all fishing are skills that were taught and learnt for one purpose, to feed and to nourish the hunter, the family and the nation. For the people with a Western tradition, the priority of food has become the role of commercial fisheries ... and the clearer divide between work and recreation has given rise to those who can now afford to pursue the excitement and pleasure of fishing as a sport."

The symposium was organized by Marc Miller, a social anthropologist from the University of Washington's School of Marine Affairs, and Dr. Charles Daxboeck, a fisheries consultant from Tahiti. Sponsors included Pacific Ocean Research Foundation, the Hawaii International Billfish Association, the Western Pacific Regional Fishery Management Council, U.S. governmental organizations and national and international gamefish associations.

## Reducing Seabird-Longline Interactions *continued from page 1.*

- buoy towing behind boats to distract and scare birds;
- modified offal discarding, in which unused baits are kept in baskets for discard after longlines are retrieved or at night when birds are gone;
- bait thawing, as thawed baits sink faster than frozen baits; and
- bait dying, using blue food coloring as studies show that birds can't distinguish shades of blue.

On the international level, the Council will be participating in the United Nations Food and Agricultural Organization (FAO) consultation on the management of incidental catch of seabirds in longline fisheries scheduled for Oct. 26–30 in Rome. In brief, the U.S. position recognizes the importance of reducing incidental catches of all seabirds and supports the development of technical and operational techniques for reducing incidental catch of seabird in longline fisheries, the adoption of mitigation measures to reduce seabird interactions, national and international plans of action to address the appropriate measures to be adopted in the fishery, monitoring measures by state and regional fisheries management bodies and the formation of an ad hoc FAO seabird technical advisory group.

## 97th Council Meeting *continued from pg 2.*

and Conservation Act, the Council approved an amendment for its plans for pelagic species, bottomfish, precious corals and crustaceans to include provisions regarding overfishing based on maximum sustainable yield, fishing communities, fishing sectors and essential fish habitat. The broad ecosystem-based management approach will help protect the habitat necessary to ensure the long-term productivity of the fisheries of the western Pacific region.

Among other actions, the Council endorsed the Pelagic Plan Team and Scientific and Statistical Committee recommendations for a new stock assessment for marlins and for information on Pacific sharkfins being landed in Hawaii. It also acted to finalize the regulatory measures to continue partial bank-specific allocation of the harvest guideline in the NWHI lobster fishery.

## Coral Plan Team Holds 1st Meeting

The Council's new Coral Reef Ecosystems Plan Team held its first meeting Sept. 30–Oct. 1 in Honolulu to start the process of developing a fishery management plan (FMP) for coral reef ecosystems. The plan team agreed that the overall goal is to optimize benefits of coral reef resources in a sustainable manner, considering economic, social, cultural and ecological aspects. It also agreed to the following FMP objectives:

- sustain production of multi-species resources;
- create flexibility in the management process for utilized and underutilized resources;
- address information needs by conducting assessments, monitoring and research;
- protect, enhance and restore habitat;
- promote sustainable use of underutilized resources in an ecologically and culturally sensitive manner;
- improve the awareness and understanding of coral reef ecosystems and their fishery potential, issues and impacts in the exclusive economic zone; and
- collaborate with other agencies and organizations concerned with coral reef ecosystems.

The team also agreed that "coral reef ecosystems" means those species, habitats and other natural resources associated with benthic substrata from 0 to 100 meters in the U.S. western Pacific and that "coral reef resources" are defined as potentially exploitable natural resources in coral reef ecosystems. The next plan team meeting is tentatively scheduled for Feb. 24–26, 1999.

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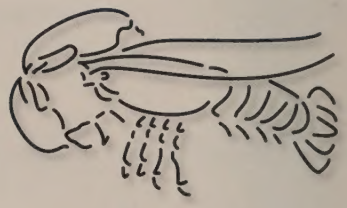

## Lobster à la Barbecue

**Add a touch of haute cuisine to your next barbecue with this simple but savory recipe from New Caledonia.**

**INGREDIENTS**

**large lobster(s)**

**butter**

**cognac**

**DIRECTIONS**

**Split lobster(s) in half lengthwise. Add a dab of butter and a generous splash of cognac to each half. Lay on a hot grill until the flesh is cooked. Serve sizzling hot. Bon appétit!**